

The MT Laboratory Sentinel

Updates from the MT Laboratory Services Bureau
<http://healthlab.hhs.mt.gov/> 12/21/09



Use of Influenza Antiviral Medication For 2009 H1N1 Infections

At the current time influenza is widespread in the U.S. and in Montana. At least through November 9, essentially all the current influenza infections have been caused by the 2009 influenza A H1N1 virus. Most persons with influenza will recover completely on their own after about a week of illness and do not need to seek medical attention; these ill persons should stay home (away from work, away from school) until at least 24 hours after they are fever-free, i.e., temperature less than 100 F. However, some persons with influenza-like illness, (i.e., fever, sore throat, cough, muscles aches) should seek medical attention. These persons are at high risk for complications from influenza infection and may benefit from treatment with influenza antiviral medication.

This issue of *Montana Public Health* highlights these risk groups and medications currently available. [NOTE: Influenza viruses are famed for being unpredictable. Recommendations regarding risk groups or medication use may change if other influenza viruses begin to circulate or if circulating viruses develop resistance to certain medications. Important details about information in this issue as well as timely updates available at <http://www.cdc.gov/h1n1flu/recommendations.htm>

- Persons at risk for complication from 2009 H1N1 influenza infection
- Treatment, prophylaxis
- Reduce delay of treatment initiation
- Influenza antiviral medications currently available
- Availability and compounding of pediatric oral suspension
- Dosing guidelines for oseltamivir and zanamivir

For the entire newsletter please go to:

http://www.dphhs.mt.gov/PHSD/prevention_opps/pdf/MPHNov09.pdf
Montana Public Health PREVENTION OPPORTUNITIES UNDER THE BIG SKY

Pioneering Standardization in Veterinary Susceptibility Testing

CLSI has played a key role in education of veterinary diagnostic laboratory personnel. M31 is the key document used by veterinary diagnostic laboratories on a global basis.

Development of In Vitro Susceptibility Testing Criteria and Quality Control Parameters for Veterinary Antimicrobial Agents; Approved Guideline—Third Edition (M37-A3) has been essential in the education of academic and industrial personnel on the data needed to develop quality control guidelines and interpretive criteria for new and existing agents. As a result, CLSI has a major role in guiding the judicious use of antimicrobial agents in veterinary medicine.

Jeffrey L. Watts, PhD, RM (NRCM), M (ASCP) Pfizer Animal Health
http://clsi.informz.net/clsi/archives/archive_658028.html



Seasonella merryensis

STUDY SUGGESTS MASKS RIVAL RESPIRATORS FOR FLU PROTECTION

In findings sure to renew the continuing controversy over respiratory protection for healthcare workers, surgical masks appeared to protect hospital nurses from influenza about as well as N-95 respirators did in a randomized trial conducted in Ontario.

There were only two more confirmed flu cases among a group of more than 200 mask-wearing nurses than in a similar size group of nurses wearing N-95 respirators, according to the report published yesterday by the *Journal of the American Medical Association (JAMA)*. The result met a statistical test for showing that the masks were "noninferior" to the respirators.

The report is described as the first randomized trial comparing different forms of respiratory protection against flu to reach publication. It comes a few weeks after the news of a study by Australian researchers in which N-95 respirators were found to be clearly better than surgical masks for preventing flu in healthcare workers. That study was reported at a medical meeting but has not yet been published in a journal.

An accompanying *JAMA* editorial by Johns Hopkins University praised the study on several counts. The two study groups "were well balanced with similar risk factors for influenza infection, including vaccination and febrile respiratory illness among household members, and participants were evenly distributed across study hospital wards."

To read the entire article go to:

<http://www.cidrap.umn.edu/cidrap/content/influenza/general/news/oct0209masks.html>
Oct 2, 2009 (CIDRAP News)

MT Communicable Disease Update as of 12/18/09

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<http://cdepi.hhs.mt.gov>

DISEASE INFORMATION

Summary – Week 49 – Ending 12/12/2009 – Disease reports received at DPHHS during the reporting period December 6-12, 2009 included the following:

- Vaccine Preventable Diseases: Pertussis (2), Invasive Streptococcal Disease (3), Varicella (1)
- Enteric Diseases: Cryptosporidiosis (2), Giardiasis (1), Salmonellosis (1)
- Other Conditions: None
- Travel Related Conditions: None

Measles??? Although it may seem like influenza is the only disease going around right now, we recently had a report of a rash that looked like measles. This particular rash turned out to be related to Group A Streptococcus. There are many rashes that may look like measles. Attached is a tool that may be useful for clinicians in distinguishing between rashes.

NOTE: The spreadsheets have multiple pages, each indicated by a tab in the bottom left corner. Tabs on the worksheet reflect the following: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases; (3) cases just this week; (4) clusters and outbreaks; and (5) an STD summary.

THE "BUZZ"

Influenza

During week 49 (12/6/09 – 12/12/09), influenza activity continued to decrease in the U.S. Activity is now widespread in 11 states. Nationally, the proportion of outpatient visits for influenza-like illness (ILI) was 2.6% which is above the national baseline of 2.3%. This is the seventh consecutive week of national decreases in ILI after four consecutive weeks of sharp increases. During week 49, 7.6% of all deaths reported through the 122-Cities Mortality Reporting System were due to pneumonia and influenza (P&I) which is above the epidemic threshold of 7.1%. Including week 49, P&I mortality has been above threshold for eleven consecutive weeks. Ninety-nine percent of the influenza viruses identified so far continue to be 2009 H1N1 influenza A viruses. These viruses remain similar to the virus chosen for the 2009 H1N1 vaccine, and remain susceptible to the antiviral drugs oseltamivir and zanamivir with rare exception.

Influenza is unpredictable. Although the incidence of disease is decreasing, it's possible that other waves of influenza activity may occur – caused by either 2009 H1N1 viruses or regular seasonal flu viruses.

Even though influenza incidence is decreasing, persons in targeted groups who have not been vaccinated should get vaccinated!

UPDATE! Activity in Montana – Activity in Montana is at the **LOCAL** level. There are still cases being reported in certain parts of the state; however, the number of PCR confirmed cases has dropped significantly. **2009 influenza A (H1N1) continues to predominate - no other subtypes of influenza A are circulating at this time in Montana.**

DO NOT send rapid test positive influenza A specimens to the MPHL for confirmation at this time. We are currently assessing the positive predictive value of rapid tests and will provide guidance during the next 1-2 weeks regarding any changes to surveillance activities. Please continue to send rapid test positive **influenza B** specimens to the MPHL for confirmation.

IMPORTANT! Hospitalized/Death Reporting - *Please report all laboratory confirmed (PCR, rapid test, viral culture positive) hospitalized cases and deaths due to all types of influenza to the local health department who will then report to the state. Period of interest: August 30, 2009 – present.*

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Hepatitis A Testing - More providers are ordering hepatitis A virus total antibody tests (HAV Total Ab). This test measures both IgM and IgG and cannot be used to determine whether a person has *acute* hepatitis A. The only test that is diagnostic for acute hepatitis A is the hepatitis A virus IgM antibody (HAV IgM). The following table provides information on the interpretation of hepatitis A testing.

Interpretation of Hepatitis A Virus Serologic Results

	HAV IgM*	HAV Total Ab**
No infection or exposure	Neg	Neg
Acute infection	Pos	Pos
Past infection or immunization	Neg	Pos

* **Primary test – required or highly recommended**

** Secondary test – not required; may be desirable for assessment of past exposure or immunization

INFORMATION / ANNOUNCEMENTS**NEW! Montana Influenza Reports**

- *Montana Public Health Prevention Opportunities Under the Big Sky*
2009 H1N1 INFLUENZA: A status report
http://www.dphhs.mt.gov/PHSD/prevention_opps/pdf/MPHDec09-h1n1-report.pdf
- Surveillance Snapshot – Reported H1N1 Influenza Hospitalizations
Information on reported hospitalizations in Montana 9/1/09 – 11/30/09

http://www.dphhs.mt.gov/PHSD/epidemiology/documents/SurveillanceSnapshot-H1N1_Hosp.pdf

NEW! Salmonella Cluster - CDC is collaborating with public health officials in many states to investigate a multistate outbreak of human *Salmonella* serotype Typhimurium infections due to contact with water frogs including African Dwarf Frogs. No cases documented in Montana yet. The full update including advice to consumers is posted at: <http://www.cdc.gov/salmonella/typh1209/>